Page 1

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
S1	21072	phase near locked near loop	USPAT	OR	OFF	2004/10/19 16:50
S2	1761	phase near frequency near detector	USPAT	OR	OFF	2004/10/19 16:50
S4	5	phase near polarity near counter	USPAT	OR	OFF	2004/10/19 16:55
S5	1	charage near pump	USPAT	OR	OFF	2004/10/19 16:51
S6	8456	charge near pump	USPAT	OR	OFF	2004/10/19 16:51
S7	19861	voltage near control\$2 near oscillator	USPAT	OR	OFF	2004/10/19 16:51
S8	0	S1 and S2 and S4 and S6 and S7	USPAT	OR	OFF	2004/10/19 16:52
S9	1057	S1 and S2 and S7	USPAT	OR	OFF	2004/10/19 16:52
S10	582	S9 and S6	USPAT	OR	OFF	2004/10/19 16:52
S11	0	S10 and S4	USPAT	OR	OFF	2004/10/19 16:53
S12	61	S10 and (reference near oscillator)	USPAT	OR	OFF	2004/10/19 16:56
S13	0	S12 and S4	USPAT	OR	OFF	2004/10/19 16:57
S21	26209	phase near lock\$2 near loop	USPAT	OR	OFF	2004/10/20 13:30
S22	1534	(phase and frequency) near detector	USPAT	OR	OFF	2004/10/20 13:30
S23	2854	phase near error near signal	USPAT	OR	OFF	2004/10/20 13:30
S24	2875	phase near error near (signal or generator)	USPAT	OR	OFF	2004/10/20 13:31
S25	11984	gain near signal	USPAT	OR	OFF	2004/10/20 13:38
S26	19861	voltage near control\$2 near oscillator	USPAT	OR	OFF	2004/10/20 13:38
S27	19861	S26	USPAT	OR	OFF	2004/10/20 13:39
S28	230362	control near signal	USPAT	OR	OFF	2004/10/20 13:39
S29	7	S21 and S22 and S24 and S25 and S26 and S18	USPAT	OR	OFF	2004/10/20 13:42
S30	4	S21 and S22 and S24 and S25 and S26 and S28	USPAT	OR	OFF	2004/10/20 13:40
S31	1167	S21 and S22	USPAT	OR	OFF	2004/10/20 13:42
S32	1	S31 and Ipump	USPAT	OR	OFF	2004/10/20 13:42
S33	5934	reference near oscillator	USPAT	OR	OFF	2004/10/20 13:44
S34	260	S33 and S22	USPAT	OR	OFF	2004/10/20 13:44
S35	24	S34 and S23	USPAT	OR	OFF	2004/10/20 13:46
S36	2875	phase near error near (generator or signal)	USPAT	OR	OFF	2004/10/20 16:52
S37	2	voltage near charge near oscillator	USPAT	OR	OFF	2004/10/20 16:53
S38	19861	voltage near control\$2 near oscillator	USPAT	OR	OFF	2004/10/20 16:53
S39	11984	gain near signal	USPAT	OR	OFF	2004/10/20 16:54

Page 2

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
S40	5934	reference near oscillator	USPAT	OR	OFF	2004/10/20 16:54
S41	13	S36 and S38 and S39 and S40	USPAT	OR	OFF	2004/10/20 16:56
S42	26209	phase near lock\$2 near loop	USPAT	OR	OFF	2004/10/20 16:57
S43	11	S42 and S41	USPAT	OR	OFF	2004/10/20 16:57
S44	2471	S40 and S42	USPAT	OR	OFF	2004/10/20 17:13
S45	232	S44 and S36	USPAT	OR	OFF	2004/10/20 17:14
S46	0	S45 and S37	USPAT	OR	OFF	2004/10/20 17:14
S47	180	S45 and S38	USPAT	OR	OFF	2004/10/20 17:14
S48	53	S47 and threshold	USPAT	OR	OFF	2004/10/20 17:15
S49	53	S48 and phase near error	USPAT	OR	OFF	2004/10/20 17:15
S50	0	S48 and S49 and compare near (threshold or phase near error)	USPAT	OR	OFF	2004/10/20 17:15
S51	53	S48 and S49	USPAT	OR	OFF	2004/10/20 17:16
S52	45	S51 and control near signal	USPAT	OR	OFF	2004/10/20 17:16
S53	7	S52 and gain near signal	USPAT	OR	OFF	2004/10/20 17:16
S54	45	S52 and S40	USPAT	OR	OFF	2004/10/20 17:17
S55	36	S54 and phase near locked near loop	USPAT	OR	OFF	2004/10/20 17:17
S56	21072	phase near locked near loop	USPAT	OR	OFF	2004/10/20 17:33
S57	1534	(phase and frequency) near detector	USPAT	OR	OFF	2004/10/20 17:33
S58	19026	pll	USPAT	OR	OFF	2004/10/20 18:01
S59	28006	pll or phase near locked near loop	USPAT	OR	OFF	2004/10/20 18:02
S60	1344	S59 and lag and lead	USPAT	OR	OFF	2004/10/20 18:02
S61	384	S60 and gain and reference near signal	USPAT	OR	OFF	2004/10/20 18:02
S62	11	S61 and first near gain and second near gain	USPAT	OR	OFF	2004/10/21 15:33
S63	25468	S61 and voltage nera controlled near oscillator	USPAT	OR	OFF	2004/10/20 18:13
S64	267	S61 and voltage near controlled near oscillator	USPAT	OR	OFF	2004/10/20 18:13
S65	7	S64 and S62	USPAT	OR	OFF	2004/10/20 18:13
S66	28006	pll or phase near locked near loop	USPAT	OR	OFF	2004/10/21 11:07
S67	28006	S66	USPAT	OR	OFF	2004/10/21 11:08
S68	479	first near gain near signal	USPAT	OR	OFF	2004/10/21 11:08
S69	418	second near gain near signal	USPAT	OR	OFF	2004/10/21 11:08
S70	14	S66 and S68 and S69	USPAT	OR	OFF	2004/10/21 11:24
S71	5518	first near gain	USPAT	OR	OFF	2004/10/21 11:24
S72	4707	second near gain	USPAT	OR	OFF	2004/10/21 11:24

Ref #	Hits	Search Query	DB	Default Operator	Plurals	Time Stamp
S73	63053	first near reference	USPAT	OR	OFF	2004/10/21 11:25
S74	37245	second near reference	USPAT	OR	OFF	2004/10/21 11:25
S75	230362	control near signal	USPAT	OR	OFF	2004/10/21 11:25
S76	8	S66 and S71 and S72 and S73 and S74 and S75	USPAT	OR	OFF	2004/10/21 11:36
S77	2239	(first and second) near reference near signal	USPAT	OR	OFF	2004/10/21 11:37
S78	242	S66 and S77 and S75	USPAT	OR	OFF	2004/10/21 11:37
S79	1	S78 and S68 and S69	USPAT	OR	OFF	2004/10/21 11:38
S80	2	S78 and S71 and S72	USPAT	OR	OFF	2004/10/21 11:41
S81	38	(lead and lag) near error	USPAT	OR	OFF	2004/10/21 11:42
S82	19	S66 and S81	USPAT	OR	OFF	2004/10/21 11:43
S83	0	S82 and S68 and S69	USPAT	OR	OFF	2004/10/21 11:42
S84	0	S82 and S71 and S72	USPAT	OR	OFF	2004/10/21 11:42
S85	1534	(phase and frequency) near detector	USPAT	OR	OFF	2004/10/21 11:50
S86	1534	S85	USPAT	OR	OFF	2004/10/21 11:53
S87	5	S85 and S81	USPAT	OR	OFF	2004/10/21 11:54
S88	1789	compare and input and lead and lag	USPAT	OR	OFF	2004/10/21 11:55
S89	339	S66 and S88	USPAT	OR	OFF	2004/10/21 11:55
S90	51034	error near signal	USPAT	OR	OFF	2004/10/21 11:55
S91	169	S89 and S90	USPAT	OR	OFF	2004/10/21 11:56
S92	2	S91 and S71 and S72	USPAT	OR	OFF	2004/10/21 11:56
S93	116	S91 and error and gain and control and reference	USPAT	OR	OFF	2004/10/21 11:57
S94	63	S93 and reference near signal	USPAT	OR	OFF	2004/10/21 11:57
S95	49	S94 and control near signal and voltage near controlled near oscillator	USPAT	OR	OFF	2004/10/21 11:57
S96	28006	pll or phase near locked near loop	USPAT	OR	OFF	2004/10/21 15:20
S97	1789	compare and input and lead and lag	USPAT	OR	OFF	2004/10/21 15:20
S98	339	S96 and S97	USPAT	OR	OFF	2004/10/21 15:20
S99	51034	error near signal	USPAT	OR	OFF	2004/10/21 15:20
S100	169	S98 and S99	USPAT	OR	OFF	2004/10/21 15:20
S101	116	S100 and error and gain and control and reference	USPAT	OR	OFF	2004/10/21 15:20
S102	63	S101 and reference near signal	USPAT	OR	OFF	2004/10/21 15:37
S103	1534	(phase and frequency) near detector	USPAT	OR	OFF	2004/10/21 15:38

Ref #	Hits	Search Query	DB	Default Operator	Plurals	Time Stamp
S104	1534	S103	USPAT	OR	OFF	2004/10/21 15:38
S105	5934	reference near oscillator	USPAT	OR	OFF	2004/10/21 15:38
S106	5934	S105	USPAT	OR	OFF	2004/10/21 15:38
S107	23436	gain and reference near signal	USPAT	OR	OFF	2004/10/21 15:41
S108	230362	control near signal	USPAT	OR	OFF	2004/10/21 15:41
S109	284	S108 and S107 and S103 and S96	USPAT	OR	OFF	2004/10/21 15:41
S110	14191	lead and lag	USPAT	OR	OFF	2004/10/21 15:42
S111	56	S109 and S110	USPAT	OR	OFF	2004/10/21 15:42
S112	2875	phase near error near (generator or signal)	USPAT	OR	OFF	2004/10/21 16:21
S113	19861	voltage near control$2 near oscillator	USPAT	OR	OFF	2004/10/21 16:21
S114	5934	reference near oscillator	USPAT	OR	OFF	2004/10/21 16:21
S115	26209	phase near lock$2 near loop	USPAT	OR	OFF	2004/10/21 16:21
S116	2471	S114 and S115	USPAT	OR	OFF	2004/10/21 16:21
S117	232	S116 and S112	USPAT	OR	OFF	2004/10/21 16:21
S118	180	S117 and S113	USPAT	OR	OFF	2004/10/21 16:21
S119	53	S118 and threshold	USPAT	OR	OFF	2004/10/21 16:21
S120	21072	phase near locked near loop	USPAT	OR	OFF	2004/10/21 16:36
S121	92279	(first and second) near signal	USPAT	OR	OFF	2004/10/21 16:37
S122	14191	lead and lag	USPAT	OR	OFF	2004/10/21 16:37
S123	57	phase near error near generator	USPAT	OR	OFF	2004/10/21 16:37
S124	226846	gain	USPAT	OR	OFF	2004/10/21 16:37
S125	65712	reference near signal	USPAT	OR	OFF	2004/10/21 16:37
S126	0	S120 and S121 and S122 and S123 and S124 and S125	USPAT	OR	OFF	2004/10/21 16:38

ID	Count	Query	Database	Op	State	Date
S150	8456	charge near pump	USPAT	OR	OFF	2004/10/25 10:27
S151	56	S149 and S150	USPAT	OR	OFF	2004/10/25 10:50
S152	15162	vco	USPAT	OR	OFF	2004/10/25 10:27
S153	40	S151 and S152	USPAT	OR	OFF	2004/10/25 10:27
S154	2082	S136 and S146 and S152	USPAT	OR	OFF	2004/10/25 10:29
S155	515	S154 and S150	USPAT	OR	OFF	2004/10/25 10:29
S156	1	phase near locked near loop and (phase and frequency) near detector and (phase near error near generator)	USPAT	OR	OFF	2004/10/25 11:05
S157	12	S136 and S137 and S144	USPAT	OR	OFF	2004/10/25 11:06
S158	21072	phase near locked near loop	USPAT	OR	OFF	2004/10/25 13:06
S159	14191	lag and lead	USPAT	OR	OFF	2004/10/25 13:06
S160	2854	phase near error near signal	USPAT	OR	OFF	2004/10/25 13:06
S161	57	phase near error near generator	USPAT	OR	OFF	2004/10/25 13:06
S162	0	S158 and S159 and S161	USPAT	OR	OFF	2004/10/25 13:07
S163	174	S158 and S159 and S160	USPAT	OR	OFF	2004/10/25 14:01
S164	26	S163 and (phase and frequency) near detector	USPAT	OR	OFF	2004/10/25 14:00
S165	174	S163 and S160	USPAT	OR	OFF	2004/10/25 14:26
S166	242	(lead and lag) near (input or signal)	USPAT	OR	OFF	2004/10/25 14:27
S167	11	S158 and S166 and S160	USPAT	OR	OFF	2004/10/25 14:39
S168	30	(lead and lag) near input	USPAT	OR	OFF	2004/10/25 14:39
S169	0	S158 and S168 and S160	USPAT	OR	OFF	2004/10/25 14:40
S170	3	S158 and S168 and phase near error	USPAT	OR	OFF	2004/10/25 15:16
S171	475	S158 and S159 and error near signal	USPAT	OR	OFF	2004/10/25 15:21

ID	Count	Query	Database	Op	State	Date
S127	0	S120 and S121 and S122 and S123	USPAT	OR	OFF	2004/10/21 16:38
S128	0	S120 and S122 and S123 and S124 and S125	USPAT	OR	OFF	2004/10/21 16:38
S129	5909	S120 and S121	USPAT	OR	OFF	2004/10/21 16:38
S130	412	S129 and S122	USPAT	OR	OFF	2004/10/21 16:38
S131	0	S130 and S123	USPAT	OR	OFF	2004/10/21 16:39
S132	205	S130 and S124	USPAT	OR	OFF	2004/10/21 16:39
S133	120	S132 and S125	USPAT	OR	OFF	2004/10/21 16:40
S134	92	S133 and voltage near controlled near oscillator	USPAT	OR	OFF	2004/10/21 16:40
S135	60	pll and gain near controller and vco	USPAT	OR	OFF	2004/10/21 17:07
S136	21072	phase near locked near loop	USPAT	OR	OFF	2004/10/25 09:54
S137	57	phase near error near generator	USPAT	OR	OFF	2004/10/25 09:54
S138	24	S136 and S137	USPAT	OR	OFF	2004/10/25 09:56
S139	11984	gain near signal	USPAT	OR	OFF	2004/10/25 09:55
S140	2	S138 and S139	USPAT	OR	OFF	2004/10/25 09:55
S141	15560	(phase or frequency) near generator	USPAT	OR	OFF	2004/10/25 10:06
S142	15732	S138 vand S141	USPAT	OR	OFF	2004/10/25 09:57
S143	12	S138 and S141	USPAT	OR	OFF	2004/10/25 09:57
S144	17972	(phase or frequency) near detector	USPAT	OR	OFF	2004/10/25 10:06
S145	12	S138 and S144	USPAT	OR	OFF	2004/10/25 10:24
S146	10700	phase near error	USPAT	OR	OFF	2004/10/25 10:25
S147	2125	S136 and S146 and S144	USPAT	OR	OFF	2004/10/25 10:25
S148	6474	S136 and S144	USPAT	OR	OFF	2004/10/25 10:26
S149	163	S147 and S139	USPAT	OR	OFF	2004/10/25 10:27

S17 2	26	S171 and S164	USPAT	OR	OFF	2004/10/25 15:33
S17 3	515	(phase/frequency) near detector	USPAT	OR	OFF	2004/10/25 15:33
S17 4	39	S160 and S158 and S173	USPAT	OR	OFF	2004/10/25 16:09
S17 5	0	"phase error" same "lead and lag"	USPAT	OR	OFF	2004/10/25 16:11
S17 6	0	"phase error" same "lead error signal"	USPAT	OR	OFF	2004/10/25 16:12
S17 7	508	"phase error" same "lead"	USPAT	OR	OFF	2004/10/25 16:12
S17 8	389	"phase error" same "lag"	USPAT	OR	OFF	2004/10/25 16:13
S17 9	174	S158 and S177 and S178	USPAT	OR	OFF	2004/10/25 16:14
S18 0	0	S179 and S161	USPAT	OR	OFF	2004/10/25 16:14
S18 1	12	S179 and S164	USPAT	OR	OFF	2004/10/25 16:14

S35	16	S24 and S23 and S27 and S34 and S26	USPAT	OR	OFF	2004/11/01 12:04

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
S1	21107	phase near locked near loop	USPAT	OR	OFF	2004/10/28 16:58
S2	9401	phase near comparator	USPAT	OR	OFF	2004/10/28 16:58
S3	4544	S1 and S2	USPAT	OR	OFF	2004/10/28 16:58
S4	14204	lead and lag	USPAT	OR	OFF	2004/10/28 16:58
S5	370	S3 and S4	USPAT	OR	OFF	2004/10/28 16:58
S6	10714	phase near error	USPAT	OR	OFF	2004/10/28 16:58
S7	168	S5 and S6	USPAT	OR	OFF	2004/10/28 16:59
S8	21509	error same generator	USPAT	OR	OFF	2004/10/28 16:59
S9	69	S7 and S8	USPAT	OR	OFF	2004/10/28 17:06
S10	3050	(first and second) near gain	USPAT	OR	OFF	2004/10/28 17:07
S11	2	S7 and S10	USPAT	OR	OFF	2004/10/28 17:07
S12	227104	gain	USPAT	OR	OFF	2004/10/28 17:19
S13	79	S7 and S12	USPAT	OR	OFF	2004/10/28 17:19
S14	17143	control same reference same gain	USPAT	OR	OFF	2004/10/28 17:20
S15	30	S13 and S14	USPAT	OR	OFF	2004/10/28 17:20
S16	15189	vco	USPAT	OR	OFF	2004/10/28 17:20
S17	27	S15 and S16	USPAT	OR	OFF	2004/10/28 17:20
S18	9401	phase near comparator	USPAT	OR	OFF	2004/11/01 11:33
S19	14399	phase near detector	USPAT	OR	OFF	2004/11/01 11:33
S20	227104	gain	USPAT	OR	OFF	2004/11/01 11:33
S21	1703415	control	USPAT	OR	OFF	2004/11/01 11:34
S22	2360553	reference	USPAT	OR	OFF	2004/11/01 11:34
S23	15189	vco	USPAT	OR	OFF	2004/11/01 11:34
S24	19059	pll	USPAT	OR	OFF	2004/11/01 11:34
S25	339	S18 and S19 and S20 and S21 and S22 and S23 and S24	USPAT	OR	OFF	2004/11/01 11:34
S26	12001	gain near signal	USPAT	OR	OFF	2004/11/01 11:34
S27	14204	lead and lag	USPAT	OR	OFF	2004/11/01 11:34
S28	57	S25 and S27	USPAT	OR	OFF	2004/11/01 11:51
S29	65772	reference near signal	USPAT	OR	OFF	2004/11/01 11:54
S30	332363	error	USPAT	OR	OFF	2004/11/01 11:54
S31	230598	control near signal	USPAT	OR	OFF	2004/11/01 11:54
S32	65772	reference near signal	USPAT	OR	OFF	2004/11/01 11:55
S33	4	S18 and S23 and S24 and S26 and S27 and S29 and S30 and S31 and S32	USPAT	OR	OFF	2004/11/01 12:03
S34	10714	phase near error	USPAT	OR	OFF	2004/11/01 12:04

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
S1	28006	pll or (phase near locked near loop)	USPAT	OR	OFF	2004/10/21 15:47
S2	10700	phase near error	USPAT	OR	OFF	2004/10/21 16:01
S3	193763	gain and reference	USPAT	OR	OFF	2004/10/21 15:47
S4	1818	(gain and reference and control) near signal	USPAT	OR	OFF	2004/10/21 15:48
S5	19823	voltage near controlled near oscillator	USPAT	OR	OFF	2004/10/21 15:48
S6	114	S1 and S2 and S4 and S5	USPAT	OR	OFF	2004/10/21 15:49
S7	14191	lead and lag	USPAT	OR	OFF	2004/10/21 15:52
S8	9	S6 and S7	USPAT	OR	OFF	2004/10/21 15:52
S9	23436	gain and reference near signal	USPAT	OR	OFF	2004/10/21 16:01
S10	384	S1 and S7 and S9	USPAT	OR	OFF	2004/10/21 16:04
S11	377	S10 and control	USPAT	OR	OFF	2004/10/21 16:04